ABSTRACT

A computer program executes a simulation. The computer program includes a plurality of service programs, where the service programs are configured to collectively determine simulated attributes of objects of an environment under simulated operation. Each service is associated with at least a subset of object attributes in an object database. Furthermore, each service is executing at a rate independent of the other services, and at least some of the services access and operate upon object attributes, from the object database, with which the service is associated. A write queue program is associated with each service, to queue write requests from the service to write determined simulated attributes to the object database. Nodes coordinate execution of the queued requests to cause the determined simulated attributes to be written to the object database in a manner such that each service has a coherent view of all the object attributes.